

# Yorktown Naval Weapons Station

## York County, Virginia Superfund Program Site Fact Sheet

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**Type of Facility:** Naval Federal Facility

**Funding:** Department of Defense  
Defense State Memorandum of Agreement

**Lead Agency:** Navy

### Site Description and History

The Yorktown Naval Weapons Station (Yorktown NWS) is a 10,500-acre facility in central York County on the Virginia Peninsula. The installation produces, maintains, and stores ordnance used by the Atlantic Fleet. It was originally named the U.S. Mine Depot and was commissioned on July 1, 1918, to support the laying of mines in the North Sea during World War I.

The installation was listed on the National Priorities List (NPL) on October 13, 1992. The facility entered a Federal Facilities Agreement (FFA) with the Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ) in September 1994. The FFA provided a blueprint for cleanup activities and identified 21 sites potentially needing remediation. Also identified in the FFA were 19 Site Screening Areas and 21 Areas of Concern that may require further investigation. Most of the sites are landfills containing drums of solvents, oil and grease; residues from explosives; and batteries and transformers. A more detailed description of each site follows.

**Site 1 - Dudley Road Landfill:** This ten-acre landfill was used from 1965 to 1979 for general disposal of wastes including: empty oil, paint, and solvent containers; asbestos; construction rubble; household appliances; an explosives-contaminated carbon; electrical wires; and waste oil. Seventeen tons of waste was disposed per year. According to the Preliminary Assessment report, the landfill operated as a burial pit in the 1950s and was, then, used as an unsupervised landfill.

**Site 2 - Turkey Road Landfill:** This five-acre landfill operated from the 1940s until 1981. An estimated eight tons of waste included: mercury and zinc carbon batteries; tree stumps and limbs; construction rubble; missile hardware (wings, fins, para packs); electrical devices; and unidentified types of drums or tanks were disposed at the site each year. According to the Remedial Investigation Interim Report, the site appears to have been created by pushing debris into the wetland and filling a low lying area.

**Site 3 - Group 16 Magazine Landfill:** This two-acre landfill operated from 1940 to 1970. An estimated three tons of solvents (TCE, trichloroethane, and methylene chloride), sludge from boiler cleaning operations, grease trap wastes, and Imhoff tank skimmings containing oil and grease were disposed of each year. The Remedial Investigation Interim Report indicated the landfill was created by pushing debris over a natural embankment.

**Site 4 - Burning Pad Residue Landfill:** The four-acre landfill was used from 1940 to 1975 and received about 17 tons of waste per year. Burning pad residues (possibly containing aluminum, RDX, TNT, and DNT), batteries from weapons, flyash mine casings, electrical equipment, transformers, and tree stumps were reportedly buried at the site. The site is currently used for foliage burning.

**Site 5 - Surplus Transformer Storage Area:** This 1,000-square foot, fenced area was used to store surplus transformers. An estimated 300 pounds of PCB waste was reported to have leaked from the transformers. In December 1982, contaminated soil was removed; however, there is no record of the depth of the removal. PCB-contaminated transformers were also removed. Surplus transformers now rest on the same pad as the contaminated ones. Sampling of the pad and soil at the level of the previous removal is being planned. All past testing shows PCBs have not migrated outside the fenced area.

**Site 6 - Explosives-Contaminated Wastewater Impoundment:** This three-acre area served as an impoundment to settle solids in the wastewater discharge from the explosives reclamation facilities from 1942 to 1975. TNT, RDX, TCE, trichloroethane, and cyclohexanone were discharged to the site.

**Site 7 - Plant 3 Explosives-Contaminated Wastewater Discharge Area:** TNT, RDX, TCE, and cyclohexane were discharged to the site between 1945 and 1975.

**Site 8 - NEDED Explosives-Contaminated Wastewater Discharge Area:** The site received wastewater discharge containing unspecified solvents, spent/neutralized acids, explosive's residues, trichloroethylene, acetone, and cyclohexanone from 1940 to 1975.

**Site 9 - Plant 1 Explosives-Contaminated Wastewater Discharge Drainage Area:** This natural drainage way carried explosives, contaminated wastewater, and possible substantial quantities of organic solvents from the late 1930s until 1975. TNT, RDX, and HMX may be present in the surface sediments in the drainage way or in the bottom sediments in Lee Pond. The pond may have served as a settling basin for particulates in the wastewater. During its 40-year period of operation, 5200 pounds of TNT and RDX and 1600 pounds HMX may have been discharged to the drainage way.

**Site 11 - Abandoned Explosives Burning Pits:** Ordnance and ordnance-contaminated wastes were burned from 1930 to 1950. Ashes and residues from the open burning of TNT, RDX, HMX, contaminated wastes, and contaminated sludges are thought to be present. The Preliminary Assessment Report stated residuals containing heavy metals

and explosives may be buried in the pits. An estimated 200 pounds of waste may have been deposited at the site. The pits have been filled.

**Site 12 - Barrack Road Landfill:** An estimated 25 tons of garbage, refuse, scrap wood, and some explosives-contaminated packaging were disposed in this landfill from 1925 until the mid-1960s.

**Site 16 - West Road Landfill:** More than 100 tons of waste including: dry carbon batteries, banding materials, pressure transmitting fluid (possibly containing PCBs), and unknown contents were disposed at the site from the 1950s until the early 1960s.

**Site 17 - Holm Road Landfill:** An estimated six tons of acid batteries from underwater weapons, hydraulic fluids from the demilling of torpedoes, drums, and scrap metal were deposited in the 1950s and 1960s.

**Site 18 - Building 476 Discharges:** This unlined drainage ditch received battery acid discharges from the 1940s until the 1960s. The discharges are reported to have contained mercury, nickel, cadmium, and lead. An estimated 100 to 200 pounds of metals may have been discharged to the ditch during the 20-year period.

**Site 19 - Conveyor Belt Soils at Building 10:** TNT-contaminated soils have been reported around the conveyor belt between buildings 10 and 98, carrying TNT flakes. Some soil was removed in 1973 and 1974, but subsequent testing found TNT and RDX in concentration as high as 17,730 and 37 ppm, respectively. Reddish water in the drain below the conveyor belt was tested and confirmed it did not contain explosives.

**Site 21 - Battery/Drum Disposal Area:** The site is an open dump along a hillside. The northwestern side is covered with thousands of 1950s vintage batteries. The area was discovered in the fall of 1990. In the southeastern part of the hillside there is a drum disposal area. Several hundred drums from one to 55-gallon cans and drums were visible and severely corroded. Labels on some 35-gallon containers showed they originally contained dry-cleaning fluid. Dates ranged from 1955 to 1959.

### **Current Site Status**

Yorktown NWS was listed on the National Priorities List on October 13, 1992. An FFA under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 120 was signed in August 1994 to ensure future activities at the installation are taken as necessary to protect public health, welfare and the environment.

Removal Actions (RAs) have been completed for Sites 4, 16 and 21 in June 1995; Sites 2, 9 and SSA 4 in October 1995; SSA 3 and 7 in August 1996; and, SSAs 1, 2, and 5 in January 1995. Records of Decision (RODs) were signed requiring no further action on Sites 5 and 16. A ROD was signed in April 1997 for Site 12 and the RA was completed in October 1997.

The ROD for Sites 9 and 19 was signed in March 1998 and remedial action has been successfully completed. Site 6 and 7 ROD's was signed in October 1998. The ROD for Sites 1 and 2 was signed in June 1999. RODS were signed for sites 11 and 17 in 2000 and remedial action was completed.

### **Community Relations**

A federal facility may provide their own community relations program; however, it must be consistent with CERCLA, the National Contingency Plan, and the Environmental Protection Agency (EPA) policies. VDEQ staff members review and comment on documents such as Community Relations Plans, fact sheets, slide shows, etc. They also participate in Restoration Advisory Board and public meetings, as requested, visit site locations, and provide additional community relations support, as needed.

<b>VDEQ Representative</b>	<b>Information Repository</b>
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